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WATER SUPPLY OUTLOOK FOR NEVADA

Feb 14 1977

U.S. DEPT. OF AGRICULTURE
SOIL CONSERVATION SERVICE



U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

**NEVADA DEPARTMENT of CONSERVATION
and NATURAL RESOURCES
DIVISION of WATER RESOURCES**

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF
FEB. 1, 1977

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SNOW COURSE MEASUREMENTS BY A SURVEY TEAM IN UTAH'S WASATCH RANGE.
ORC-254-10

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, 6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR NEVADA

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

|||||

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ALL AVERAGES ARE FOR 1958-72 PERIOD

WATER SUPPLY OUTLOOK FOR NEVADA

MINIMAL SNOWPACK CONDITIONS EXIST IN ALL OF NEVADA AND THE EAST SLOPE OF THE SIERRAS. PROSPECTS ARE NOT GOOD FOR ADEQUATE WATER SUPPLIES THIS SEASON. UNLESS CONDITIONS CHANGE DRASTICALLY, EXTREMELY LIMITED WATER SUPPLIES WILL BE EXPERIENCED THIS SEASON.

SNOW COURSE MEASUREMENTS FOR FEBRUARY 1 INDICATE SNOWPACKS FROM 15 TO 25 PERCENT OF THE 1958-72 AVERAGE. THIS IS VERY SIMILAR TO LAST YEAR'S SNOWPACK WITH THE EXCEPTION OF NORTHEASTERN NEVADA WHICH HAD ABOVE AVERAGE LAST YEAR.

RESERVOIR STORAGE IN THE TAHOE, TRUCKEE, CARSON AND WALKER DRAINAGES ARE BELOW AVERAGE DUE TO THE HEAVY SUPPLEMENTAL USE REQUIRED LAST YEAR. RYE PATCH, WILD HORSE, LAKE MEAD AND MOHAVE ALL HAVE CONSIDERABLY ABOVE AVERAGE STORAGE.

February 1 snow course measurements continue to indicate a minimal snowpack throughout Nevada and the Sierras. Measurements are similar to last year's in the Sierras. Last year the Upper Humboldt and Owyhee Rivers had average to above average snowpack on February 1.

The Tahoe and Truckee Basin snow courses indicate water contents at 23 percent of average while the Carson and Walker Basins are 20 percent. Other basins in the state and their snowpack percentages are: Owyhee 16 percent; Upper Humboldt 17 percent; Snake 15 percent; Northern Great Basin 30 percent; Eastern Nevada 40 percent and Central Great Basin 50 percent.

Usually by February 1, 60 to 65 percent of the snowpack has been deposited. If average precipitation occurred from February 1 to April 1, the snowpack still would be only 50 percent of average. April 1 is the usual date for maximum water content on most snow courses. Many snow courses, such as, Independence Lake, Squaw Valley, and Ward Creek need 35 to 40 inches of water to attain April 1 average. Lower elevation courses need less but most need at least 300 percent of average precipitation to reach April 1 averages.

Reservoir storage is below average on the Sierra streams. Lake Tahoe's elevation is now 6,224.36 feet, containing 165,000 acre-feet as compared to last year's 499,000 and an average of 426,000 acre-feet. Under present conditions Lake Tahoe will probably drop to the 6,223.0 feet elevation in June. This is the first time the water level has dropped to the rim since October 25, 1961. Stampede Reservoir contains 42,000 acre feet as compared to last year's 147,000 acre-feet. Boca Reservoir has 24,000 acre-feet compared to 28,000 acre-feet last year. Prosser is empty.

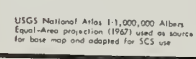
Lahontan Reservoir contains 150,000 acre-feet. This compares to the average of 182,000 acre-feet and last year's 205,000 acre-feet.

Rye Patch Reservoir on the Humboldt River contains 104,000 acre-feet for 121 percent of average storage but is below last year's 154,000 acre-feet. Wild Horse Reservoir has 44,000 acre-feet as compared to last year's 55,000 acre-feet.

Lake Mead shows 21,988,000 acre-feet or 109 percent of last year's and some 4,667,000 acre-feet more than the 1958-72 average.

With the present conditions, water shortages will occur in all parts of the state except the few areas with adequate reservoir storage.

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INDEX TO NEVADA SNOW COURSES (By Basins)

Refer to the map on the preceeding page for Snow Course locations.

NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.
SNAKE RIVER BASIN					
SNAKE RIVER					
15H1MA	Bear Creek	31	46N	58E	7800
15H2	Fox Creek	33	46N	58E	6800
15H13A	Goat Creek	31	46N	60E	8800
15H15A	Hummingbird Springs	6	45N	60E	8945
15H20a	Merritt Mountain	10	46N	54E	7000
15H14A	Pole Creek Ranger Station	13	46N	59E	8330
15H18a	Red Point	15	47N	61E	7940
15H3A	76 Creek	6	44N	58E	7100
15H19a	Stag Mountain	29	41N	58E	7800

OWYHEE RIVER					
15H4MP	Big Bend	30	45N	56E	6700
16H6a	Columbia Basin	31	44N	53E	6650
16H8a	Fawn Creek	2	45N	52E	7000
15H5	Gold Creek	32	45N	56E	6600
16H1M	Jack Creek, Lower	18	42N	53E	6800
16H2A	Jack Creek, Upper	9	42N	53E	7250
16H4	Jacks Peak	28	42N	53E	8420
16H5	Laurel Draw	20	45N	53E	6700
17G4a	Louse Canyon (Oreg.)	27	40S	44E	6440
15H9MP	Taylor Canyon	35	39N	53E	6200

INTERIOR

UPPER HUMBOLDT RIVER					
15J17a	American Beauty	32	31N	58E	7800
15J12A	Corral Canyon	27	28N	57E	8500
15J1MP	Oorsey Basin	28	35N	60E	8100
15J3	Ory Creek	5	34N	60E	6500
15H7	Fry Canyon	31	43N	54E	6700
15J9MP	Green Mountain	23	29N	57E	8000
15J10	Harrison Pass #1	9	28N	57E	6600
15J11	Harrison Pass #2	16	28N	57E	7400
15J4	Lamoille #1	15	32N	58E	7100
15J5	Lamoille #2	14	32N	58E	7200
15J6M	Lamoille #3	24	32N	58E	7700
15J7	Lamoille #4	19	32N	59E	8000
15J8P	Lamoille #5	31	32N	59E	8700
15J18a	Pole Canyon	31	35N	61E	9140
15J16a	Robinson Lake	23	33N	59E	9200
15H6MP	Roded Flat	36	43N	53E	6800
15J2	Ryan Ranch	1	34N	59E	5800
15H8	Tremewan Ranch	9	39N	55E	5700
15H10P	Trout Creek, Lower	28	37N	61E	6900
15H11A	Trout Creek, Upper	4	36N	61E	8500

LOWER HUMBOLDT RIVER					
17K1	Big Creek Camp Ground	10	17N	43E	6600
17K2	Big Creek Mine	23	17N	43E	7600
17K3	Big Creek, Upper	26	17N	43E	7800
17H2	Buckskin, Lower	25	45N	39E	6700
17H1	Buckskin, Upper	11	45N	39E	8200
17L1	Corral, Lower	12	11N	40E	7500
17L2	Corral, Upper	20	11N	41E	8000
17J2	Golconda #2	22	35N	39E	6000
17H4	Granite Peak	22	44N	39E	7800
17H5	Lamance Creek	13	42N	38E	6000
17H3	Martin Creek	18	44N	40E	6700
16H3AP	Midas	18	39N	46E	7200
16H7	Toe Jam a	29	40N	50E	7700

EASTERN NEVADA					
14L1	Baker #1	29	13N	69E	7950
14L2	Baker #2	30	13N	69E	8950
14L3	Baker #3	25	13N	68E	9250
14K2	Berry Creek	26	17N	65E	9100
14K1	Bird Creek	34	19N	65E	7500
15J13	Cave Creek	25	27N	57E	7500
15J14	Hager Canyon	34	27N	57E	8000
15J15	Hoie-In-Mountain	6	35N	61E	7900
14K8	Kalamazoo Creek	34	20N	65E	7400
14K3	Murray Summit	25	16N	62E	7250
15K1	Robinson Summit	34	18N	61E	7600
14K7	Silver Creek #2	30	16N	69E	8000
14K5	Ward Mountain #2	25	15N	62E	8900

CENTRAL GREAT BASIN					
18M2	Campito Mountain (Cal.)	19	55	35E	10200
18M5a	Chiatovich Flat	32	25	34E	10500
15N2	Clark Canyon	8	19S	56E	9000
18M1	Montgomery Pass	4	1N	33E	7100
18M3a	Pinchot Creek	28	1N	33E	9300
18M4a	Piute Pass (Cal.)	33	45	33E	11700
15N1	Trough Springs	23	18S	55E	8500

NORTHERN GREAT BASIN					
19H1	Bald Mountain	17	45N	21E	6720
20H5	Barber Creek (Cal.)	23	39N	16E	6500
20H6	Cedar Pass (Cal.)	12	43N	14E	7100
18G6a	Oeno Creek (Oreg.)	14	41S	34E	6000
18H1	Oisaster Peak	8	47N	34E	6500
20H3a	Oisalm Swamp (Cal.)	31	48N	17E	7000
20H7	Eagle Peak (Cal.)	35	40N	15E	7200
19H3	49-Mountain	7	42N	19E	6000
19H2	Hays Canyon	1	39N	18E	6400
19H4a	Little Bally Mountain	8	45N	19E	6000
20H9	Mt. Bidwell	6	47N	16E	7200
17G5a	Oregon Canyon (Oreg.)	9	40S	40E	7240
17H6a	Quinn Ridge	9	47N	41E	6300
20H4	Reservation Creek (Cal.)	12	46N	15E	5900
18G5a	Trout Creek (Oreg.)	10	41S	38E	7800

NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.
LAKE TAHOE					
20L6STZ	Echo Peak	35	12N	17E	7800
20L5	Echo Summit (Cal.)	6	11N	18E	7450
20L7stz	Fallen Leaf (Cal.)	36	13N	17E	6300
19L2	Freel Bench (Cal.)	36	12N	18E	7300
19K6	Glenbrook #2	13	14N	18E	6900
19L3MSZ	Hagans Meadow (Cal.)	36	12N	18E	8000
20L4	Lake Lucille (Cal.)	28	12N	17E	8200
19K4MSTZ	Marlette Lake	18	15N	19E	8000
20L3	Richardsons #2 (Cal.)	6	12N	18E	6500
20L1	Rubicon #1 (Cal.)	6	13N	17E	8100
20L2	Rubicon #2 (Cal.)	6	13N	17E	7500
20K16	Tahoe City (Cal.)	6	15N	17E	6250
20K26	Tahoe City Alt. (Cal.)	7	15N	17E	6300
20K27	Tahoe City Cross (Cal.)	1	15N	16E	6750
19L1	Upper Truckee (Cal.)	21	12N	18E	6400
20K17M	Ward Creek (Cal.)	21	15N	16E	7000
20K25STZ	Ward Creek #2 (Cal.)	21	15N	16E	6750

TRUCKEE RIVER					
20K14	Boca #2 (Cal.)	28	18N	17E	5900
20K22	Brockway Summit (Cal.)	3	17N	16E	7100
20K21	Onner Park #2 (Cal.)	18	17N	16E	6000
20K10	Onner Summit (Cal.)	25	17N	14E	6900
20K7*	Fordyce Lake (Cal.)	34	18N	13E	6500
20K8*	Furnace Flat (Cal.)	10	17N	13E	6700
20K4MSTPZ	Independence Camp (Cal.)	34	19N	15E	7000
20K3	Independence Creek (Cal.)	14	19N	15E	6500
20K5	Independence Lake (Cal.)	9	18N	15E	8450
19K3	Little Valley	17	16N	19E	6300
19K2	Mt. Rose	7	17N	19E	9000
19K7	Mt. Rose Ski Area	30	17N	19E	9000
20K6	Sage Hen Creek (Cal.)	7	18N	16E	6500
20K19	Squaw Valley #2 (Cal.)	6	15N	16E	7500
20K13M	Truckee #2 (Cal.)	22	17N	16E	6400
20K2*	Webber Lake (Cal.)	29	19N	14E	7000
20K1*	Webber Peak (Cal.)	30	19N	14E	8000

CARSON RIVER					
19L5	Blue Lakes (Cal.)	30	9N	19E	8000
19L4	Carson Pass, Upper (Cal.)	22	10N	18E	8600
19K5	Clear Creek	6	14N	19E	7300
19L19a	Ebbetts Pass (Cal.)	17	8N	20E	8700
19L16a	Fish Valley, Upper (Cal.)	1	7N	22E	8050
19L06a	Poison Flat (Cal.)	25	8N	21E	7900
19L18AS	Wet Meadows Lake (Cal.)	26	9N	19E	8100
19L20a	Wolf Creek (Cal.)	35	8N	20E	8000

WALKER RIVER					
19L11	Buckeye Forks (Cal.)	20	4N	23E	8500
19L10	Buckeye Roughs (Cal.)	15	4N	23E	7900
19L12A	Center Mountain (Cal.)	4	3N	23E	9400
19L8	Leavitt Meadows (Cal.)	4	5N	22E	7200
19L17a	Lobdell Lake (Cal.)	20	7N	24E	9200
19L7M	Sonora Pass (Cal.)	1	5N	21E	8800
19M1*	Tioga Pass (Cal.)	30	1N	25E	9900
19L13	Virginia Lakes (Cal.)	5	2N	25E	9500
19L22MSZ	Virginia Lakes Ridge	32	3N	25E	9200
19L9	Willow Flat (Cal.)	21	5N	23E	8250

COLORADO

LOWER COLORADO RIVER					
15N5	Kyle Canyon	27	19S	56E	8200
15N3	Lee Canyon #2	9	19S	56E	9200
15N8	Lee Canyon #3	10	19S	56E	8500
14M1	Mathew Canyon	10	6S	70E	6000
14M2	Pine Canyon	23	6S	69E	6200
15N7	Rainbow Canyon #2	6	20S	57E	8100
15L1	White River #1	31	13N	59E	7400

LEGEND

NUMBERING SYSTEM (EXAMPLE)

19K4	Snow Course Only
19K45	Snow Course and Snow Pillow
19K4M	Snow Course and Soil Moisture
19K4A	Snow Course and Aerial Marker
19K4P	Snow Course and Storage Precipitation Gage
19K4MA	Snow Course, Soil Moisture and Aerial Marker
19K4MP	Snow Course, Soil Moisture and Precipitation Gage
19K4STZ	Snow Course, Snow Pillow and Temperature Radio Telemetered.

Lower case letters m, a, p, s, t, z, indicate no snow course, only a Soil Moisture Station, Aerial Marker, Storage Precipitation Gage, Snow Pillow, Temperature, or Radio Telemetered.

*Located on adjacent watershed

SNOW WATER DEPTHS

20 19 18 17 16 15 14 13

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


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SNOW WATER DEPTHS

As percent of 1958-72 15 year average

LEGEND

-  Less than 80 percent of average
-  Within 20 percent of average
-  More than 20 percent above average

-5-



0 20 40 60 80 100
MILES
0 20 40 60 80 100
KILOMETERS

USGS National Atlas 1:1,000,000 Albers
Equal-area projection 1983 used as source
for base map and adapted for SCS use

STREAMFLOW FORECASTS (Thousand Acre Feet) as of: February 1, 1977

Forecasts are based on snow-water presently stored in the mountain watersheds and the assumption that precipitation will be near average throughout the forecast period. Peak flow forecasts indicate the most probable range for the maximum average 24-hour flow. All averages are for 1958-72 period.

FORECAST POINT	Forecast Period	Forecast This Year	This Year as Percent of Average	Average +
Owyhee River near Gold Creek, NV <u>1</u> /	April-July	5	27%	18
Owyhee River near Owhyee, NV <u>1</u> /	April-July	15	22%	68
Humboldt River at Palisade, NV	April-July	40	21%	193
West Walker below Little Walker River near Coleville, CA	April-July	45	31%	145

1/ Corrected for storage

+ 1958 -

PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average †
Peak flow forecasts not issued until March 1, 1977.		

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Low flow forecast not issued until March 1, 1977.			

SOIL MOISTURE MEASUREMENTS

STATION	Profile (Inches)		Soil Moisture (Inches)		
	Depth	Capacity	Date	This Year	Average †
<u>OWYHEE-HUMBOLDT BASIN</u>					
Bear Creek	72	16.9	NS	-	-
Big Bend	48	16.7	1/25/77	10.5	14.6*
Rodeo Flat	42	11.0	NS	-	8.9*
Taylor Canyon	48	15.1	1/25/77	8.4	11.9*
Jack Creek, Lower	48	8.7	NS	-	-

* Adjusted average

RESERVOIR STORAGE (Thousand Acre Feet) as of February 1, 1977

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average†
Owyhee	Wild Horse	72	44	55	17
Lower Humboldt	Rye Patch	172	104	154	86
Colorado	Mohave	1,810	1,676	1,616	1,669
Colorado	Mead	27,217	21,988	20,265	17,321
Tahoe	Tahoe	732	165	499	426
Truckee	Boca	41	24	28	10
Truckee	Stampede	220	42	147	**
Truckee	Prosser***	30	0.1	9	8*
Carson	Lahontan	291	150	205	182
West Walker	Topaz	59	11	41	34
East Walker	Bridgeport	42	11	33	28

* Adjusted average
 ** Storage began August 1, 1969
 *** Flood control use allocation of 20,000 acre-feet between November 1 and April 10

TOTAL RESERVOIR STORAGE (Thousand Acre Feet)

MONTH	This Year	Last Year	Average †
October 1	574	961	718
January 1	488	900	714
February 1	509	936	783
March 1		1040	843
April 1		1134	893
May 1		1117	934

† 1958-1972 period.

The above data developed from Wild Horse, Rye Patch, Tahoe, Boca, Lahontan, Topaz, and Bridgeport Reservoirs in 1,000 Acre-Feet.

TOTAL USABLE CAPACITY 1409

SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Elevation				Last Year	Average †
<u>LAKE TAHOE</u>						
Echo Peak (CA)	7800	1/31/77	18	5.3	3.6	-
Echo Summit (CA)	7450	1/31/77	16	4.8	6.0	23.8
Freel Bench (CA)	7300	1/26/77	8	2.0	1.6	9.3*
Glenbrook #2	6900	1/28/77	7	2.1	2.0	8.0
Hagans Meadow	8000	1/26/77	10	2.4	2.3	12.9
Heavenly Valley	8800	1/31/77	14	3.0	6.2	-
Lake Lucille (CA)	8200	NS			-	-
Marlette Lake	8000	1/31/77	16	3.5	3.3	13.6
Richardsons #2 (CA)	6500	1/28/77	10	2.8	4.7	11.4
Rubicon #1 (CA)	8100	NS			-	-
Rubicon #2 (CA)	7500	NS			-	-
Tahoe City Cross (CA)	6750	1/29/77	14	4.4	0.2	-
Upper Truckee (CA)	6400	1/26/77	7	1.6	2.0	7.8
Ward Creek #2 (CA)	7000	1/31/77	20	6.0	7.8	26.8
Ward Creek #3 (CA)	6750	1/31/77	24	7.3	7.4	-
<u>TRUCKEE RIVER</u>						
Boca #2 (CA)	5900	1/30/77	3	1.3	0.1	5.2
Brockway Summit (CA)	7100	1/30/77	10	3.4	0.0	15.0*
Castle Creek	7400	1/31/77	22	6.1	9.2	33.1
Donner Park #2 (CA)	6000	1/30/77	11	3.1	2.5	12.1*
Donner Summit (CA)	6900	2/1/77	17	5.0	4.7	25.3*
Fordyce Lake (CA)	6500	1/31/77	20	6.4	7.4	21.2*
Furnace Flat (CA)	6700	1/31/77	25	8.0	9.4	26.2
Independence Camp (CA)	7000	1/31/77	13	2.9	3.4	17.1
Independence Creek (CA)	6500	1/31/77	8	2.0	1.4	-
Independence Lake (CA)	8450	1/31/77	16	4.4	10.5	-
Little Valley	6300	1/27/77	8	1.8	0.7	-
Mount Rose	9000	1/31/77	18	5.1	5.6	-
Mount Rose Ski Area	8850	1/30/77	23	6.7	10.1	-
Sage Hen Creek (CA)	6500	1/31/77	12	2.7	2.5	12.6
Squaw Valley #2 (CA)	7500	1/31/77	26	7.3	12.4	33.8
Truckee #2 (CA)	6400	1/30/77	9	2.9	0.9	10.8
Webber Lake	7000	NS			-	-
Webber Peak	8000	NS			-	-
<u>CARSON RIVER</u>						
Blue Lakes	8000	1/25/77	22	7.0a	6.1	-
Carson Pass, Upper (CA)	8600	1/26/77	16	3.6	6.1	22.1
Clear Creek	7300	1/27/77	11	2.6	1.9	-
Ebbetts Pass AM (CA)	8700	1/26/77	10	2.7a	7.4a	22.5
Ebbetts Pass #2 (CA)	8700	1/26/77	17	4.6	9.4	-
Fish Valley, Upper (CA)	8050	1/26/77	11	2.2a	0.0a	10.4*
Poison Flat	7900	1/26/77	12	2.9	2.3	10.4*
Wet Meadows Lake AM (CA)	8050	1/26/77	13	4.2a	3.5a	18.7*
Wet Meadows #2 (CA)	8050	1/26/77	18	4.6	6.5	-
Wolf Creek AM (CA)	8000	1/26/77	10	2.7a	2.0a	23.1*

SNOW COURSE MEASUREMENTS

SNOW COURSE MEASUREMENTS		THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average †
<u>WALKER RIVER</u>						
Buckeye Roughs (CA)	7900	NS	-	-	-	-
Center Mountain	9400	1/26/77	16	4.0	7.9	22.0*
Leavitt Meadow (CA)	7200	NS	-	-	0.0	-
Lobdell Lake	9200	1/26/77	11	2.1	1.0	12.3*
Sawmill Ridge (CA)	8750	1/26/77	11	2.3	1.2	-
Sonora Pass (CA)	8800	1/26/77	13	3.2	2.7	15.8
Tioga Pass (CA)	9900	1/27/77	16	4.7	5.2	16.3
Virginia Lakes (CA)	9500	1/26/77	12	3.1	0.5	10.6
Virginia Lakes Ridge (CA)	9200	1/26/77	10	2.5	1.9	-
Willow Flat (CA)	9900	1/26/77	8	1.6	0.1	-
<u>NORTHERN GREAT BASIN</u>						
Bald Mountain AM	6720	1/27/77	4	0.8a	1.0a	-
Barber Creek (CA)	6500	1/25/77	11	3.0	4.8	7.9
Cedar Pass (CA)	7100	1/24/77	14	5.0	10.0	10.6*
Denio Creek AM (OR)	6000	2/1/77	T	0.1a	Ta	0.6*
Disaster Peak	6500	NS	-	-	-	-
Dismal Swamp AM (CA)	7000	1/27/77	13	2.6a	11.4a	10.1
Eagle Peak (CA)	7200	NS	-	-	-	-
49 Mountain	6000	1/27/77	8	1.6	1.6	3.1
Hays Canyon	6400	1/26/77	7	1.4	1.5	2.8
Little Bally Mountain AM	6000	1/27/77	7	1.5a	2.2a	2.0*
Mount Bidwell	7240	NS	-	-	-	-
North Star	6200	NS	-	-	-	-
Oregon Canyon AM (OR)	7240	2/1/77	T	0.1a	3.4a	3.5
Quinn Ridge AM	6300	2/1/77	T	0.1a	1.0a	1.4
Reservation Creek (CA)	5900	1/26/77	9	2.5	6.9	8.0
Trout Creek AM (OR)	7800	2/1/77	4	0.6a	4.8a	3.9
<u>SNAKE RIVER</u>						
Bear Creek	7800	1/31/77	9	1.9a	11.6a	13.
Fox Creek	6800	NS	-	-	-	-
Goat Creek	8800	1/29/77	9	1.8a	9.8	10.
Hummingbird Springs	8945	1/31/77	18	3.9a	12.7a	14.
Merritt Mountain AM	7000	1/26/77	6	0.6a	4.2a	3
Pole Creek Ranger Station	8330	1/29/77	15	3.3	13.4	12
Red Point	7940	NS	-	-	2.7	5
76 Creek	7100	1/31/77	6	0.6a	5.8a	7
Stag Mountain AM	7700	1/26/77	3	0.3a	1.2a	3

SNOW COURSE MEASUREMENTS

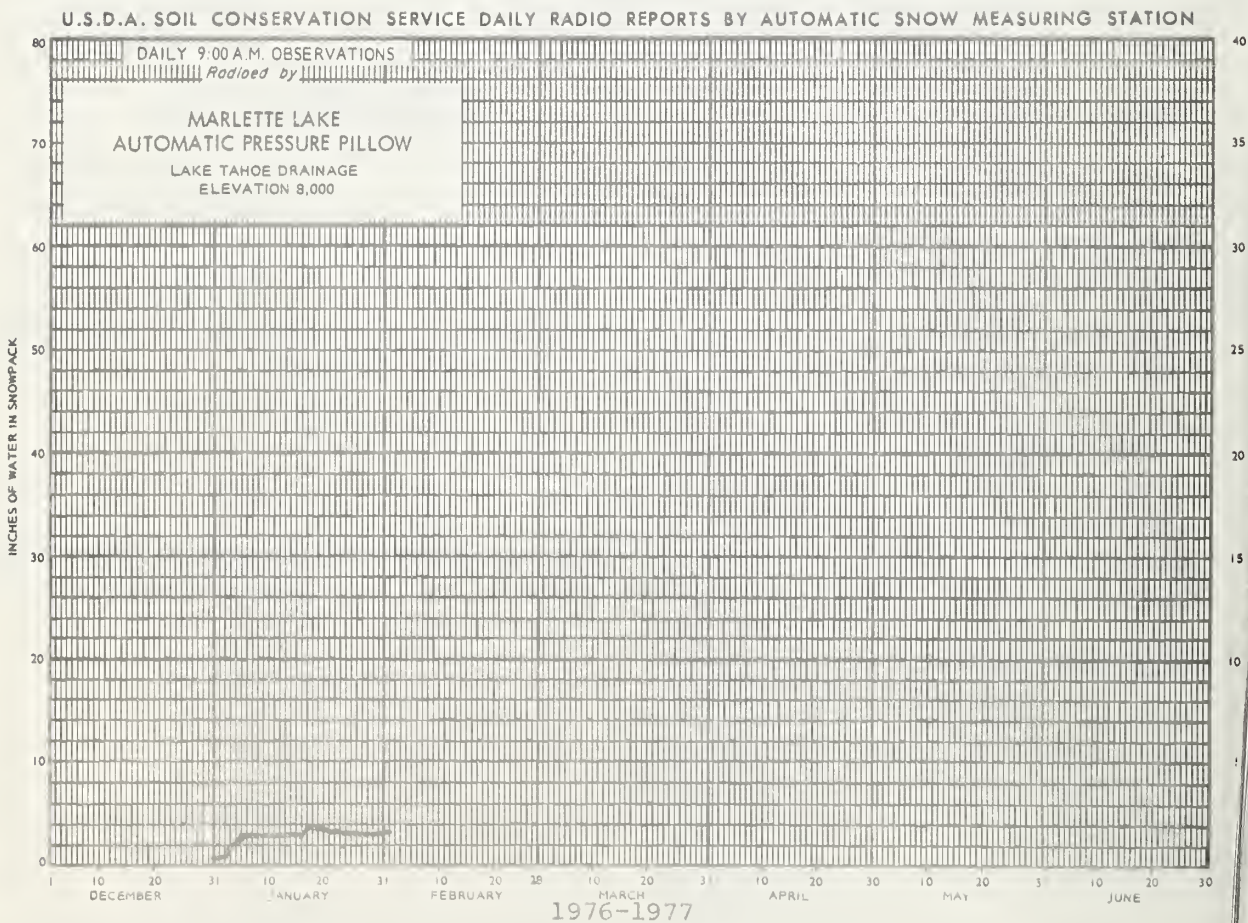
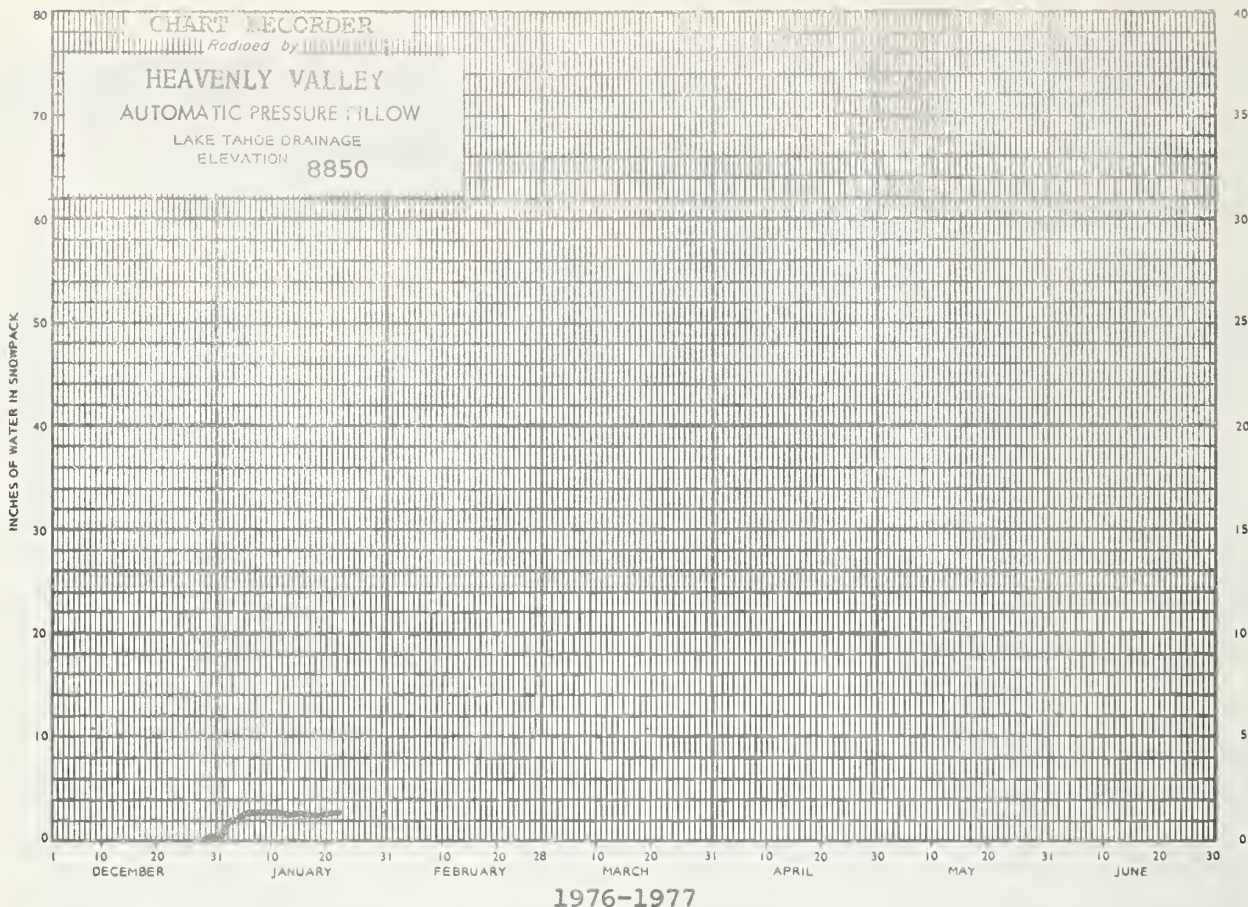
DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Elevation				Last Year	Average †
<u>OWYHEE RIVER</u>						
Big Bend	6700	1/25/77	6	0.6	4.8	5.7
Columbia Basin AM	6650	1/26/77	2	0.3a	7.6a	6.8*
Fawn Creek AM	7000	1/26/77	5	0.7a	4.0a	10.4*
Gold Creek	6600	1/25/77	5	0.5	3.8	3.8
Jack Creek, Lower	6800	NS	-	-	3.3	-
Jack Creek, Upper	7250	1/25/77	8	1.4	6.0	4.7
Jacks Peak	8420	1/25/77	20	4.4	15.4	-
Laurel Draw	6700	1/25/77	8	0.7	-	-
Louse Canyon AM (OR)	6440	2/1/77	T	0.1a	0.6a	2.2*
Taylor Canyon	6200	1/25/77	5	0.3	1.7	3.6
<u>UPPER HUMBOLDT RIVER</u>						
American Beauty AM	7800	1/26/77	14	2.2a	5.9a	5.6*
Corral Canyon	8500	1/26/77	12	2.3a	4.5a	6.2*
Dorsey Basin	8100	1/25/77	11	2.2	9.4	-
Dry Creek	6500	NS	-	-	-	-
Fry Canyon	6700	1/25/77	6	0.9	4.9	4.9
Green Mountain	8000	NS	-	-	-	-
Harrison Pass #1	6600	NS	-	-	-	-
Harrison Pass #2	7400	NS	-	-	-	-
Lamoille #1	7100	1/25/77	10	1.1	5.0	5.8
Lamoille #3	7700	1/25/77	11	1.6	5.8	7.6
Lamoille #5	8700	1/25/77	17	3.2	18.3	16.5*
Pole Canyon	7700	1/25/77	10	2.9	-	4.8*
Robinson Lake AM	9200	1/26/77	11	2.6a	22.5a	15.7*
Rodeo Flat	6800	1/25/77	5	0.6	4.6	3.9
Ryan Ranch	5800	NS	-	-	-	-
Smith Creek	7700	1/25/77	13	2.4a	-	-
Tent Mountain AM	7000	1/26/77	5	0.8a	5.0a	-
Tent Mountain AM	8350	NS	-	-	16.1a	-
Tremewan Ranch	5700	1/26/77	1	0.1	0.7	1.2
Trout Creek, Lower	6900	NS	-	-	-	-
Trout Creek, Upper	8500	1/26/77	20	3.6a	8.7a	10.2
<u>LOWER HUMBOLDT RIVER</u>						
Big Creek Campground	6600	1/26/77	10	1.4	2.5	-
Big Creek Mine	7600	1/26/77	13	2.5	3.9	-
Big Creek, Upper	7800	1/26/77	10	2.1	4.4	-
Buckskin, Lower	6700	NS	-	-	-	-
Buckskin, Upper	8200	NS	-	-	-	-
Corral, Lower	7500	NS	-	-	-	-
Golconda #2	8000	NS	-	-	-	-
Granite Peak	6000	NS	-	-	-	-
Lamance Creek	7800	NS	-	-	-	-
Martin Creek	6700	NS	-	-	-	-
Midas AM	7200	1/26/77	0	0.0a	0.0a	2.4a
Toe Jam AM	7700	1/26/77	2	0.2a	4.9a	6.4*

SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE NAME		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (inches)	Water Content (inches)	Last Year	Average †
<u>EASTERN NEVADA</u>						
Baker #1	7950	1/31/77	5	0.6	1.8	-
Baker #2	8950	1/31/77	12	1.7	4.3	-
Baker #3 AM	9250	1/27/77	17	3.4a	5.5a	8.3*
Berry Creek	9100	NS	-	-	-	-
Bird Creek	7500	NS	-	-	-	-
Hole-in-Mountain	7900	NS	-	-	-	-
Kalamazoo Creek	7400	NS	-	-	2.5a	-
Mount Defiance AM	9400	1/27/77	12	2.4a	8.8a	-
Murray Summit	7250	NS	-	-	0.0	-
Robinson Summit	7600	NS	-	-	0.0	-
Silver Creek #2 AM	8000	1/27/77	9	1.8a	2.2a	4.5*
Ward Mountain #2 AM	7400	1/27/77	9	1.8a	-	4.7*
White River #1	7400	NS	-	-	-	-
<u>CENTRAL GREAT BASIN</u>						
Campito Mountain (CA)	10200	1/27/77	6	0.9	-	3.4*
Chiatovich Flat AM	10500	NS	-	-	0.0	1.8*
Clark Canyon	9000	NS	-	-	-	-
Montgomery Pass	7100	1/28/77	4	0.9	0.0	1.0
Pinchot Creek AM	9300	NS	-	-	0.0	0.2*
Piute Pass AM	11700	NS	-	-	0.0	2.1*
Trough Springs	8500	NS	-	-	-	-
<u>LOWER COLORADO RIVER</u>						
Kyle Canyon	8200	NS	-	-	-	-
Lee Canyon #2	9000	NS	-	-	-	-
Lee Canyon #3	8500	NS	-	-	-	-
Mathew Canyon	6000	1/31/77	2	0.7	0.0	1.7
Pine Canyon	6200	1/31/77	4	0.9	0.1	2.2*
Rainbow Canyon #2	8100	NS	-	-	-	-
NS Not scheduled this month * Adjacent basin						
NOTE: All averages based on 1958-72, 15 year period. Fore- period is April 1 through July 31 unless otherwise not- a-Aerial marker; water content estimated. * 1958-72 justed average.						

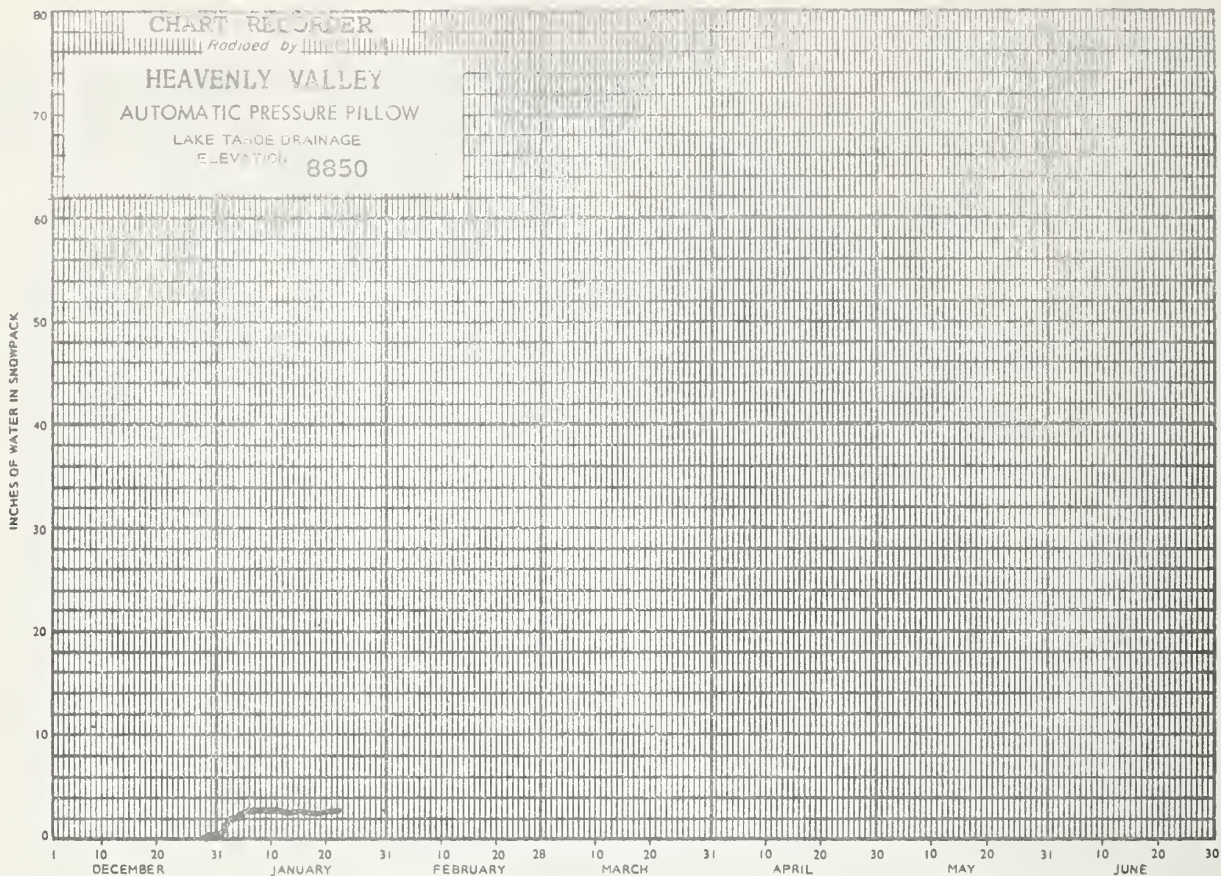
PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. OCT 1 TO DATE		
		Date of Reading	Month's Precipitation	Last Year	This Year	Last Year	Percent of Average
<u>LAKE TAHOE-TRUCKEE</u>							
Echo Peak	7800	1/31/77	3.1	-	7.7	16.0	-
Fallen Leaf	6240	1/28/77	-	-	4.3	7.7	-
Hagans Meadow	8000	1/31/77	2.3	-	5.0	-	-
Independence Camp	7000	1/31/77	2.1	1.2	4.3	9.2	-
Independence Creek	6500	1/31/77	3.4	1.4	6.8	2.4	-
Independence Lake	8450	1/31/77	2.5	-	9.7	-	-
Marlette Lake	8000	1/31/77	2.2	1.0	5.6	7.2	-
Mount Rose	9000	1/31/77	2.2	-	3.4	8.0	-
Tahoe City Cross	6750	1/31/77	1.7	1.4	5.8	5.8	-
Truckee #2	6400	1/31/77	-	-	3.4	2.4	-
Ward Creek #3	6750	1/31/77	4.4	1.4	11.5	18.6	-
<u>CARSON RIVER</u>							
Ebbetts Pass	8750	1/26/77	2.4	2.4	8.3	13.8	-
Poison Flat	7900	1/26/77	2.8	1.2	-	7.6	-
Wet Meadows	8050	1/26/77	2.4	1.6	6.4	6.6	-
<u>WALKER RIVER</u>							
Lobdell Lake	9200	1/26/77	1.6	-	2.0	-	-
Sonora Pass	8800	1/26/77	2.3	0.5	9.0	9.1	-
Virginia Lakes Ridge	9200	1/26/77	-	-	-	13.4	-
<u>HUMBOLDT RIVER</u>							
Corral Canyon	2500	NS	-	-	-	-	-
Dorsey Basin	8100	1/25/77	-	-	5.5	-	-
Green Mountain	8000	NS	-	-	-	-	-
Lamoille #3	7700	1/25/77	-	-	5.3	-	-
Midas	7200	NS	-	-	-	-	-
Rodeo Flat	6800	1/25/77	0.7	-	4.5	11.0	55
Trout Creek, Lower	6900	NS	-	-	-	-	-
<u>OWYHEE RIVER</u>							
Big Bend	6700	1/25/77	-	-	8.4	8.5	65
Jacks Peak	8420	1/25/77	-	-	14.5	-	-
Taylor Canyon	6200	1/25/77	2.1	-	6.0	7.0	93
Upper Jack Creek	7250	1/25/77	-	-	12.2	-	-
<u>SNAKE RIVER</u>							
76 Creek	7100	NS	-	-	-	-	-
Bear Creek	7800	NS	-	-	-	-	-
Goat Creek	8800	NS	-	-	-	-	-
Pole Creek RS	8300	1/29/77	-	-	11.4	-	-

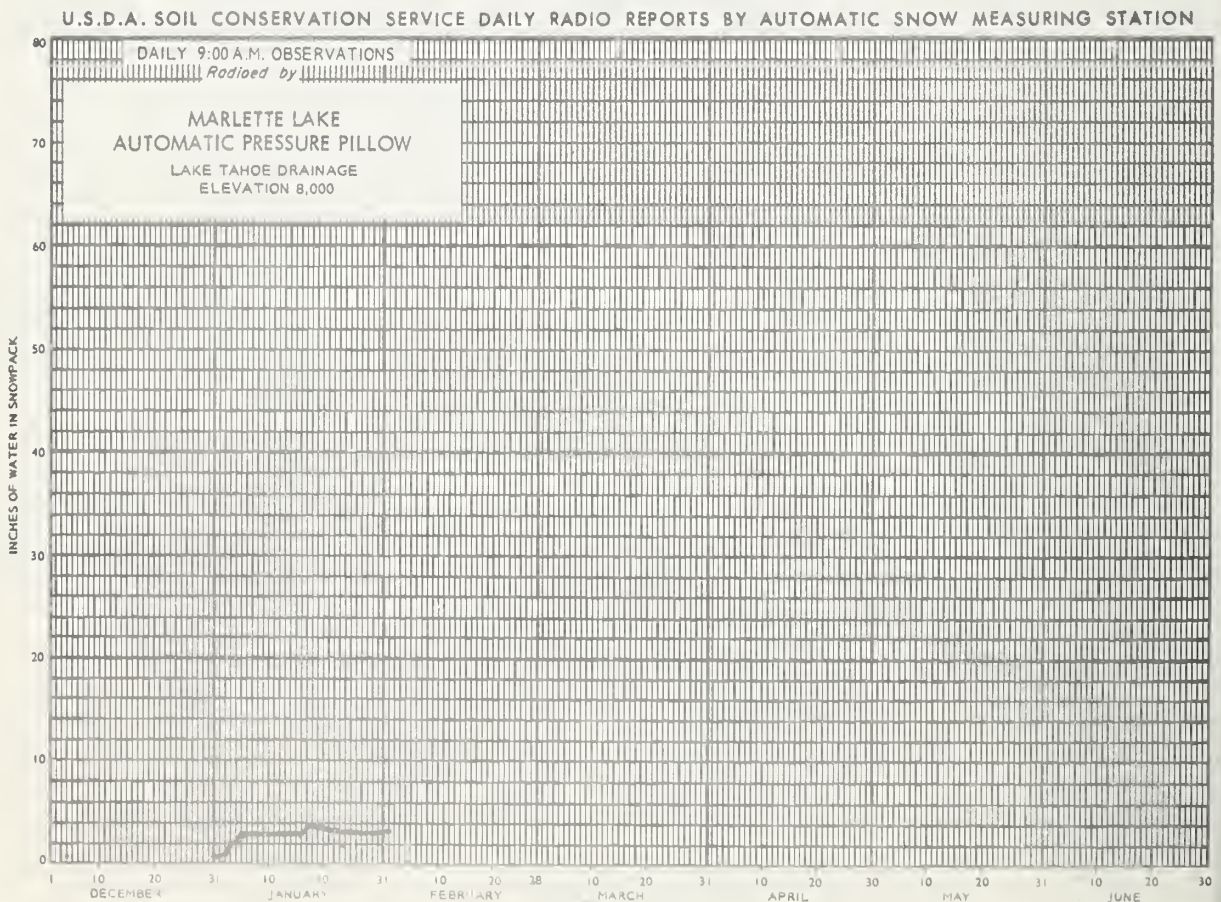


PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. OCT 1 TO DATE		
		Date of Reading	Month's Precipitation	Last Year	This Year	Last Year	Percent of Average
<u>LAKE TAHOE-TRUCKEE</u>							
Echo Peak	7800	1/31/77	3.1	-	7.7	16.0	-
Fallen Leaf	6240	1/28/77	-	-	4.3	7.7	-
Hagans Meadow	8000	1/31/77	2.3	-	5.0	-	-
Independence Camp	7000	1/31/77	2.1	1.2	4.3	9.2	-
Independence Creek	6500	1/31/77	3.4	1.4	6.8	2.4	-
Independence Lake	8450	1/31/77	2.5	-	9.7	-	-
Marlette Lake	8000	1/31/77	2.2	1.0	5.6	7.2	-
Mount Rose	9000	1/31/77	2.2	-	3.4	8.0	-
Tahoe City Cross	6750	1/31/77	1.7	1.4	5.8	5.8	-
Truckee #2	6400	1/31/77	-	-	3.4	2.4	-
Ward Creek #3	6750	1/31/77	4.4	1.4	11.5	18.6	-
<u>CARSON RIVER</u>							
Ebbetts Pass	8750	1/26/77	2.4	2.4	8.3	13.8	-
Poison Flat	7900	1/26/77	2.8	1.2	-	7.6	-
Wet Meadows	8050	1/26/77	2.4	1.6	6.4	6.6	-
<u>WALKER RIVER</u>							
Lobdell Lake	9200	1/26/77	1.6	-	2.0	-	-
Sonora Pass	8800	1/26/77	2.3	0.5	9.0	9.1	-
Virginia Lakes Ridge	9200	1/26/77	-	-	-	13.4	-
<u>HUMBOLDT RIVER</u>							
Corral Canyon	2500	NS	-	-	-	-	-
Dorsey Basin	8100	1/25/77	-	-	5.5	-	-
Green Mountain	8000	NS	-	-	-	-	-
Lamoille #3	7700	1/25/77	-	-	5.3	-	-
Midas	7200	NS	-	-	-	-	-
Rodeo Flat	6800	1/25/77	0.7	-	4.5	11.0	55
Trout Creek, Lower	6900	NS	-	-	-	-	-
<u>OWYHEE RIVER</u>							
Big Bend	6700	1/25/77	-	-	8.4	8.5	65
Jacks Peak	8420	1/25/77	-	-	14.5	-	-
Taylor Canyon	6200	1/25/77	2.1	-	6.0	7.0	93
Upper Jack Creek	7250	1/25/77	-	-	12.2	-	-
<u>SNAKE RIVER</u>							
76 Creek	7100	NS	-	-	-	-	-
Bear Creek	7800	NS	-	-	-	-	-
Goat Creek	8800	NS	-	-	-	-	-
Pole Creek RS	8300	1/29/77	-	-	11.4	-	-



1976-1977



1976-1977

Agencies Cooperating in Collecting Data Contained in this Bulletin

FEDERAL

- Agricultural Research Service
- Bureau of Reclamation
- Fish and Wildlife Service
- Forest Service
- Geological Survey
- Navy
- Soil Conservation Service
- U. S. District Court - Federal Water Master
- NOAA, National Weather Service

STATE

- California Cooperative Snow Surveys
- California Department of Parks and Recreation
- California Department of Water Resources
- Colorado River Commission of Nevada
- Idaho Cooperative Snow Surveys
- Nevada Association of Conservation Districts
- Nevada Department of Conservation & Natural Resources
 - Division of Water Resources
 - Nevada State Forester
- Oregon Cooperative Snow Surveys
- Utah Cooperative Snow Surveys
- White Mountain Research Station, Univ. of California

PRIVATE

- Amalgamated Sugar Company
- Kennecott Copper Corporation
- Nevada Irrigation District
- Owyhee Project North Board of Control
- Owyhee Project South Board of Control
- Pacific Gas and Electric Company
- Pershing County Water Conservation District
- Sierra Pacific Power Company
- Truckee-Carson Irrigation District
- Walker River Irrigation District
- Washoe County Water Conservancy District

Other organizations and individuals furnish valuable information for the snow survey reports. Their Cooperation is gratefully acknowledged.

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